

**UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION**

Electrification and the Grid of the Future

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Docket No. AD21-12-000

**STATEMENT OF ROGER KRANENBURG,  
Vice President of Energy Strategy and Policy  
Eversource Energy Service Company**

Eversource is the largest energy company in New England serving over 4 million, electric, gas and water customers in MA, CT and NH. Eversource has embraced its role in helping the region achieve its ambitious emissions reduction goals. Eversource itself aims to be carbon neutral from its own operations by 2030. In response to state policy initiatives promoting the development and financing of low and carbon-free generation, Eversource is the largest contractor of renewable generating resources in New England. Eversource currently owns and operates 70 MW of solar capacity in Massachusetts and plans to continue solar development pursuant to state-authorized programs. In addition, we are leading the way in offshore wind development through a partnership with Ørsted, the world's leading developer and operator of offshore wind facilities.

As the energy mix continues its transition to greener sources, electrification of applications that have traditionally been powered by fossil fuels is becoming an increasingly impactful approach to greenhouse gas emission reduction. Transportation and heating provide significant decarbonization opportunity for New England, and Eversource has developed and implemented programs to help electrify both sectors. We are supporting the development of New England's electric vehicle (EV) charging network through a \$55 million investment in Massachusetts, with infrastructure programs actively being developed in Connecticut and New Hampshire as well as expanded for Massachusetts to accelerate the adoption of EVs throughout the region. Additionally, our Energy Efficiency programs are helping to transform the building thermal sector by offering rebates to customers interested in heat pumps as a heating source, supporting contractor training related to heating electrification, and educating customers about heat pumps. The Company is also piloting utility owned and operated geothermal distribution networks as an alternative heating solution.

Investments in both transmission and distribution infrastructure will be necessary to support increased demand from electrification and to ensure that these new loads are served by clean energy resources. Reliability must be maintained as customers become even more reliant on electricity for all aspects of their daily lives.

Eversource's regional transmission investments are guided primarily by the ISO New England Inc. (ISO-NE) regional planning process. Over the past two decades the process has proven to be adaptable and continues to provide cost effective solutions to changing system needs. Eversource's transmission investments have significantly improved regional reliability, lowered customer costs, and increased the usage of clean energy resources.

The ISO-NE load forecast has included demand reductions from existing and future energy efficiency and solar PV for many years. In 2020, ISO-NE also began to develop forecasts for the incremental demand from electric vehicles and air-source heat pumps. The final 2021 electrification forecasts indicate a winter peak load increase of nearly 2,500 MW by the winter of 2030/31 due to electrification. Eversource's own analysis also suggests that electrification will become an increasingly important driver of load growth during the 2030s. As this load growth materializes, further transmission infrastructure may be needed as additional generation sources, including distributed energy resources, interconnect to the system. In preparation for continued stress on limited natural gas infrastructure in New England, particularly during the winter heating months, Eversource is piloting a natural gas demand response program.

To ensure that our distribution system is fully capable of enabling this clean energy future, Eversource continues to make significant Grid Modernization investments. In Massachusetts, the Company is currently implementing an extensive program to support the transition from the historical model of one-way power flow and mechanical or even manual operation and control to one that embraces digital automation, intelligence-based control, and distributed energy resources to deliver significant enhancements in safety, reliability, resiliency and asset optimization. We are also currently constructing an industry-leading 38 MWh battery storage project in Provincetown, MA that will support service to load on the Outer Cape. Development efforts to support this work in Eversource's other service territories are underway. In addition, our customer operations is making investments to accommodate this future.

Eversource is taking proactive steps to plan for significant electrification needed to meet carbon reduction goals, including making investments in infrastructure to accommodate these anticipated electrification changes. I look forward to the discussion on this important topic.